

Feed the Future Innovation Lab
For *Collaborative Research on Nutrition* - Africa
Harvard School of Public Health -
Annual Report - Year 4

Feed the Future Innovation Lab

For Collaborative Research on Global Nutrition

Feed the Future Innovation Lab for Collaborative Research on Nutrition

Harvard School of Public Health
Partner Annual Report - Africa
2013-2014

Feed the Future Innovation Lab

For Collaborative Research on Global Nutrition



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Map or List of Countries Where Work

Uganda

List of Program Partners

Makerere University, Uganda

Acronyms

BBNC Bangalore Boston Nutrition Collaborative
HSPH Harvard School of Public Health
ME Management Entity
NILA Feed the Future Innovation Lab for Collaborative Research on Nutrition - Africa
UCCP Uganda Community Connector Project
UNCST Uganda National Council for Science and Technology

I) Executive Summary

In Year 4, Harvard School of Public Health (HSPH) grew its collaboration with Makerere University and broadened its research agenda in Uganda. HSPH research activities in Uganda are closely linked to evaluation of USAID's Uganda Community Connector Project (UCCP). During the project year, data management activities were completed on the baseline of a panel study in northern and southwestern Uganda to evaluate the impact of UCCP on household livelihoods and maternal and child nutritional outcomes, and detailed plans were laid for a birth cohort study to study the mechanisms by which UCCP impacts these outcomes. Capacity building efforts were integrated into research activities, with additional training opportunities for Ugandan students and researchers provided through the Bangalore Boston Nutrition Collaborative (BBNC) and for a junior Makerere University faculty member at HSPH.

II) Program Activities and Highlights

HSPH, in collaboration with Makerere University and Tufts University, continued implementation of the NILA Uganda Panel Study in rural districts of northern and southwestern Uganda, with finalization of study baseline data and planning for the next round of data collection. Detailed preparations and trainings were also conducted for the upcoming implementation of the NILA Uganda Birth Cohort Study. Training and capacity building for Ugandan scientists were integrated into research activities in Uganda as well as provided through short courses internationally.

III) Key Accomplishments

Management of Uganda Panel Study baseline data was completed during Year 4, and plans were made for the next round of data collection in the first quarter of Year 5. A draft analysis using baseline panel data to evaluate the relationship between linear growth faltering (stunting) in young children and the adoption and use of agricultural technologies and practices is being revised before submission to a peer-reviewed scientific journal. Detailed planning and training of staff were undertaken for the Uganda Birth Cohort study, which is also scheduled to begin implementation in the first quarter of Year 5. Specific accomplishments for the Cohort Study included development of the protocol; obtaining of institutional approvals; site selection, visits, and district inception meetings; development, testing, and revision of data collection tools and an electronic data collection application; and training of supervisors and field staff. Short-term trainings for Ugandan students, researchers, and junior faculty were conducted in Bangalore, India, and Boston, USA.

IV) Research Program Overview and Structure

HSPH research studies in Uganda are linked to the evaluation of the UCCP. All research is conducted in close collaboration with Makerere University and the ME. Effort is made to include training and active involvement of junior staff in research activities to build capacity in research on agriculture, nutrition, and health linkages.

The hire in 2014 of a Uganda-based Research Specialist, responsible for supervising all research activities conducted in collaboration among HSPH, Makerere, and Tufts, has been key for research implementation. The position was advertised, shortlisted candidates were interviewed by multiple members of the research team, and Ms. Annet Kawuma (MPH) was competitively hired. A subcontract was established between HSPH and Makerere to fund the position, and HSPH provides

supervision for the Research Specialist together with the Principal Investigator at Makerere University.

V) Research Project Reports

a) Research linked to evaluation of the UCCP

i) Uganda Panel Study

NILA's Uganda Panel Study, conducted as a collaborative effort among HSPH, Makerere University, and the ME, aims to evaluate the impact of UCCP on household livelihoods and maternal and child nutritional status. The panel study collects representative data from households in randomly selected districts initiating UCCP activities at varying stages of UCCP's scaling-up plan, thereby creating a natural experiment for evaluating UCCP. Achievements during the project year included extensive data cleaning and documentation of baseline data in partnership with the data manager at Makerere, creation of key analysis variables, and planning for the next round of panel data collection (to be conducted in early Year 5) including review of the study plan given changes in UCCP's implementation since the original study design. A draft analysis using baseline panel data of linkages between linear growth and stunting in young children and the adoption and use of agricultural technologies and practices was presented to the study team in June 2014 and is being revised based on received feedback for submission to a scientific journal. Input was also provided on other analyses being conducted by the Makerere team. Up-to-date institutional approvals for research activities have been maintained over the project year.

ii) Uganda Birth Cohort Study

NILA's Uganda Birth Cohort Study, also a collaborative effort among HSPH, Makerere University, and the ME, will examine the effect of interventions that integrate nutrition, health, agriculture, and livelihoods on maternal and child nutritional outcomes. Compared with the panel study, the cohort study will use a wider range of nutritional outcomes including biochemical measures and specifically study exposure to UCCP, uptake of its interventions, and mechanisms by which these impact maternal and child nutritional status.

There was extensive planning for this study in Year 4. The study protocol was developed and received approval from the institutional review boards at HSPH, Makerere, and the Uganda National Council for Science and Technology (UNCST). Site selection was conducted per the study protocol, and all 16 selected sub-counties were visited multiple times by personnel from HSPH, Makerere, and the ME for district inception meetings, outreach to local leaders and communities, assessment of study implementation needs, and interactions with local UCCP staff. Data collection tools were developed, tested, revised, and translated into the four predominant local languages of the study areas. An application for electronic data entry was also developed, tested, and revised as needed. Study supervisor and enumerator positions were advertised, shortlisted candidates were interviewed, and selected candidates were invited for training. Training materials were developed and training was conducted by members of the research team from all three institutions. All trained candidates underwent multiple written examinations, which formed an objective basis for hiring decisions. HSPH provided input and guidance on developing a study implementation plan and associated materials, drafting a study budget, and procurement. A

final training for study enumerators is scheduled for September 2014, with recruitment of participants to begin at the beginning of Year 5.

VI) Associate Award Research Project Reports

HSPH was not involved in Associate Awards in Africa.

VII) Human and Institutional Capacity Development

a) Training by Country

i) Short-Term

Christopher Duggan continued his role as Program Director and faculty member for the Bangalore Boston Nutrition Collaborative (BBNC) short course on nutrition research methods in January 2014. This course was attended by six trainees from Uganda as well as trainees from Nepal who were supported by the Nutrition Innovation Lab, among others. Trainees received two weeks of intensive training on research methods in international nutrition from faculty drawn from Harvard University, St. John's Research Institute, and Tufts University.

In 2014, HSPH targeted its summer training opportunities towards lecturers and junior faculty at Makerere University, with the intention that the selected candidate would utilize his or her training in future curriculum development and research at Makerere, thereby increasing the impact of NILA's capacity building efforts in Uganda. The selected candidate was also intended to engage in NILA collaborative research after returning to Uganda, having developed research ideas while at HSPH under the mentorship of HSPH faculty and staff.

This training opportunity was widely advertised at Makerere, and one candidate was competitively selected after receipt of applications and interviews by multiple NILA personnel. Dr. Agnes Nabubuya, an Assistant Lecturer in the Department of Livestock and Industrial Resources at Makerere University, attended the Summer Session for Public Health Studies at HSPH in July-August 2014. She took four intensive courses in nutrition and public health and developed a plan for an analysis and scientific paper using baseline data from the Panel Study in consultation with HSPH NILA faculty.

ii) Long –Term

HSPH did not have long-term trainees during the project year.

b) Institutional Development

i) Description

The Research Specialist, hired by Makerere in partnership with HSPH, received training in her role from researchers at both institutions. Cohort Study supervisors and field staff received extensive training in June and September 2014, respectively, on the study's background, rationale, objectives, and methodology, as well as on ethical conduct of research, details of study implementation, domains of data collection (agriculture, income, nutrition, health, sanitation, gender, etc.), anthropometric assessment of adults and children, and data collection using electronic tablets. Inception meetings for the Cohort

Study, held in each of the 12 participating districts, also informed district leaders and key personnel on the background, rationale, objectives, and methodology of the Cohort Study and more broadly on the need for more research on nutrition, health, and agricultural linkages.

ii) Partners

Partners in training and dissemination activities include Makerere University and Tufts University (ME).

VIII) Technology Transfer and Scaling Partnerships

NILA is not involved in technology development, transfer, or scaling.

IX) Governance and Management Entity Activity

Wafaie Fawzi continued his role on the Board of Directors, and Christopher Duggan continued his role on the Technical Advisory Committee during the project year.

X) Other Topics

None to report.

XI) Issues

None to report.

XII) Future Directions

In the first quarter of Year 5, the Cohort Study will begin implementation and the second round of data will be collected for the Panel Study. These two studies will generate a wealth of data on agriculture, nutrition, and health linkages in rural Uganda and allow detailed investigation of mechanisms by which integrated interventions impact maternal and child nutritional outcomes in particular. Capacity building will continue to be integrated into research activities, and additional training opportunities will be offered through BBNC and at HSPH.